

ABSTRACT OF THE DISCLOSURE

Each mixing rotor for a batch mixer is rotatably insertable into a mixing chamber such that tip clearances are defined between tips of mixing blades and an inner surface of a mixing chamber and is provided on its outer circumferential surface with a plurality of mixing blades for imparting shearing forces to a material to be mixed by causing the material to pass through the tip clearances. The plurality of mixing blades include a nonlinear blade which is substantially nonlinear from a start point to a terminal point in a development of the mixing rotor developed into a plane about its longitudinal axis, and other linear blades which are linear in the development and whose helix angle to the longitudinal axis of the mixing rotor is set at 15 to 35°. An appropriate mixing control capable of realizing both sufficient mixing and sufficient dispersion can be executed by mixing and dispersing the material in a well-balanced manner by means of the mixing rotor.